



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-1505; Project Identifier MCAI-2023-00246-T; Amendment 39-22622; AD 2023-24-05]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model CL-600-2B16 (604 Variant) airplanes. This AD was prompted by sleeve loops on some passenger oxygen mask lanyards that had improper crimping and unsealed ends. This AD requires an inspection of the passenger oxygen mask lanyards and replacement of defective oxygen mask lanyards. This AD also prohibits the installation of affected parts. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1505; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the

mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For service information identified in this final rule, contact Bombardier Business Aircraft Customer Response Center, 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-2999; email ac.yul@aero.bombardier.com; website bombardier.com.

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at regulations.gov under Docket No. FAA-2023-1505.

FOR FURTHER INFORMATION CONTACT: Gabriel Kim, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model CL-600-2B16 (604 Variant) airplanes. The NPRM published in the *Federal Register* on July 25, 2023 (88 FR 47827). The NPRM was prompted by AD CF-2023-06, dated February 9, 2023 (referred to after this as the MCAI), issued by Transport Canada, which is the aviation authority for Canada. The MCAI states the sleeve loops on certain passenger oxygen mask lanyards were found to have improper crimping and unsealed ends.

In the NPRM, the FAA proposed to require an inspection of the passenger oxygen mask lanyards and replacement of defective oxygen mask lanyards. In the NPRM, the FAA also proposed to prohibit the installation of affected parts. The FAA is issuing this AD to address these defective oxygen mask lanyards, which could result in no oxygen flow to the mask during an emergency.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1505.

Discussion of Final Airworthiness Directive

Comments

The FAA received a comment from Bombardier. The following presents the comment received on the NPRM and the FAA's response to the comment.

Request for Removal of Certain Variants

Bombardier requested that the proposed AD be revised to remove reference to 601-3A and 601-3R Variants. The commenter stated that the proposed AD only applies to Model CL-600-2B16 (604 Variant) airplanes (Challenger 605 designation). Bombardier noted that the airplane serial numbers given in Bombardier Service Bulletin 605-35-008, dated October 28, 2022, and referenced in Transport Canada AD CF-2023-06, are all Model CL-600-2B16 (604 Variant) airplanes.

The FAA agrees for the reasons provided. The FAA revised the Summary, Background, and paragraph (c) of this AD accordingly.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting this

AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information under 1 CFR Part 51

The FAA reviewed Bombardier Service Bulletin 605-35-008, dated October 28, 2022. This service information specifies procedures for a visual inspection of the existing passenger oxygen mask lanyards installed in the cabin or lavatory oxygen box assemblies, and replacement of the defective oxygen mask lanyards. The defective oxygen mask lanyards had improperly crimped sleeve loops and unsealed ends.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 120 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

| Action | Labor cost | Parts cost | Cost per product | Cost on U.S. operators |
|---------------|--|-------------------|-------------------------|-------------------------------|
| Inspection | 1 work-hour X \$85 per hour = \$85 | \$0 | \$85 | \$10,200 |

The FAA estimates the following costs to do any necessary on-condition action that would be required based on the results of any required actions. The FAA has no way of determining the number of aircraft that might need this on-condition action:

Estimated costs of on-condition actions

| Action | Labor cost | Parts cost | Cost per product |
|-------------|--|------------|------------------|
| Replacement | 2 work-hours X \$85 per hour = \$170 | \$1,149 | \$1,319 |

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2023-24-05 Bombardier, Inc.: Amendment 39-22622; Docket No. FAA-2023-1505; Project Identifier MCAI-2023-00246-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc., Model CL-600-2B16 (604 Variant) airplanes, certificated in any category, serial numbers identified in Bombardier Service Bulletin 605-35-008, dated October 28, 2022.

(d) Subject

Air Transport Association (ATA) of America Code 35, Oxygen System.

(e) Unsafe Condition

This AD was prompted by sleeve loops on some passenger oxygen mask lanyards that had improper crimping and unsealed ends. The FAA is issuing this AD to address the defective oxygen mask lanyards. The unsafe condition, if not addressed, could result in no oxygen flow to the mask during an emergency.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection of the Passenger Oxygen Mask Assemblies

Within 48 months from the effective date of this AD, visually inspect the passenger oxygen mask lanyards in the cabin or lavatory oxygen box assemblies as applicable for crimped lanyards and sealed ends, in accordance with paragraph 2.C. of the Accomplishment Instructions of Bombardier Service Bulletin 605-35-008, dated October 28, 2022.

(1) If all passenger oxygen mask lanyards are crimped and the lanyard ends are sealed: No further action is required by this paragraph.

(2) If any passenger oxygen mask lanyard is not crimped properly, or any lanyard end is not sealed properly: Before further flight, replace the passenger oxygen mask lanyard in accordance with Section 2.D. of the Accomplishment Instructions of Bombardier Service Bulletin 605-35-008, dated October 28, 2022.

(h) Parts Installation Prohibition

As of the effective date of this AD, no person may install, on any airplane, a passenger oxygen mask lanyard assembly provided with an oxygen box lanyard kit containing a lot number in paragraph (h)(1) or (2) of this AD.

(1) Oxygen box lanyard kit part number (P/N) CDKC29-006-501, lot number 2011007411, 2012010412, 2101018703, 2101035167, 2102030139, 2104003817, or 2105005522.

(2) Oxygen box lanyard kit P/N CDKC29-006-503, lot number 2011029525, 2012006900, 2103007412, or 2103029992.

(i) Additional AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager, International Validation Branch, mail it to the address identified in paragraph (j)(2) of this AD or email to: 9-AVS-AIR-730-AMOC@faa.gov. If mailing information, also submit information by email. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Validation Branch, FAA; or Transport Canada or Bombardier, Inc.'s Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Additional Information

(1) Refer to Transport Canada AD CF-2023-06, dated February 9, 2023, for related information. This Transport Canada AD may be found in the AD docket at regulations.gov under Docket No. FAA-2023-1505.

(2) For more information about this AD, contact Gabriel Kim, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 605-35-008, dated October 28, 2022.

(ii) [Reserved]

(3) For service information identified in this AD, contact Bombardier Business Aircraft Customer Response Center, 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-2999; email ac.yul@aero.bombardier.com; website bombardier.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit: www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on November 29, 2023.

Victor Wicklund,
Deputy Director, Compliance & Airworthiness Division,
Aircraft Certification Service.